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Department: Mathematics

Course No: Math 103Q

Title: Elementary Discrete Mathematics

Credits: 3

Contact: David Gross

WQ: Q

Catalog Copy: -MATH 103Q. Elementary Discrete Mathematics. Either semester. Three credits. Recommended preparation: MATH 101 or the equivalent. Not open for credit to students who have passed any mathematics course other than MATH 101, 102, 105, 107, 108, or 109.

Problem solving strategies, solutions of simultaneous linear equations, sequences, counting and probability, graph theory, deductive reasoning, the axiomatic method and finite geometries, number systems.

Course Information:

-a: The course goals remain the same: to expose students in a general education course, various applications of mathematics.

b: The format of the course is typically a 2 or 3 mid-semester exams, a final exam, quizzes or graded homework.

c: Voting methods; apportionment; financial mathematics; number theory; graph theory; deductive reasoning;... Topics can vary a bit from semester to semester.

Q Criteria : -The course include mathematics at or above the basic algebra level as an integral part of the course which is used throughout the course.

The course included the use of basic algebraic concepts such as: formulas and functions, linear and quadratic equations and their graphs, systems of equations, polynomials, fractional expressions, exponents, powers and roots, problem solving and word problems.

The course require the student to understand and carry out actual mathematical manipulations and use them in order to draw conclusions.

Role of Grad Students: -The course is taught mostly by TAs under the supervision of a course coordinator (mostly a regular faculty member). During the summer, it can be taught by a TA without supervision.